



Module - Load and Return

Fire Retardant and the Planes that Deliver it

Overview

Students will discover improved efficiencies in the tactical use of fixed wing airtankers.

Exercise

Students will get into small groups, review the scenario and answer the following questions.

- Based on your objectives in the scenario, what is your tactical plan for the airtankers?
- How will you describe the drop zone using standard terminology (head, heel, flanks, anchor, pinch)?
- Will it be a direct or indirect application and what will the coverage level(s) be given the different types of fuel?
- What specific feedback will you give the pilot?

Scenario

It is 1100, September 5 and you are a Type 4 IC on a 40 acre fire in the Sunlight Basin on the Shoshone National Forest in Wyoming. The fire is burning actively in sage and timber and you are considering ordering four airtankers to deliver retardant to help in the control of the fire. Resources on scene are 4 Type 4 engines, a Type 3 helicopter with bucket and helitack crew, and a local Type 2 crew. You have a DC-10 (VLAT) with a turnaround time of 1 hour and 20 minutes, available out of Casper. A P2V is available in West Yellowstone with a turnaround time of 1 hour and 15 minutes, and 2 SEATS are also available in West Yellowstone with the same turnaround times as the P2V. Fuels are dense lodgepole pine and sage that have a high potential for spread. There is a stream and a deep pond nearby for drafting which also has cutthroat trout in it. The weather is forecast to remain in the low 90's with RH's around 20%, winds are predicted to be 5-10 MPH out of the southeast. There is a structure 2.5 miles east of the fire on the opposite side of the river. Your immediate objective is to minimize the spread of the fire. See the Google Earth map and following tables for additional details and fire orientation.



Student Workbook



Airtankers		
Type	Gallons	Aircraft
1	>3000	VLAT, MAFFS
2	1800-2999	P2V, Convair CV-580, BAE-146
3	800-1799	CL-215, Grumman S-2, Scoopers
4	700 or less	SEAT

Recommended Retardant Coverage Levels	
Coverage level	Fuels Description
1	Annual & Perennial Western Grasses; Tundra
2	Conifer with Grass Shortneedle Closed Conifer; Summer Hardwood Longneedle Conifer; Fall Hardwood
3	Sagebrush with Grass Sawgrass Intermediate Brush (green) Light Slash
4	Shortneedle Conifer (heavy dead litter)
6	Southern Rough Intermediate Brush (cured); Alaska Black Spruce
Greater than 6	California Mixed Chaparral; High Pocosin Medium Slash Heavy Slash



Student Workbook



Special thanks to the following:

Rusty Warbis, BLM Flight Operations Manager, NIFC

JC Curd, Fire Chemical Program Manager, NIFC

Major Richard Pantusa, USAF, MAFFS / Aircraft Commander

Grahame Wilson, Convair 580 Captain, Conair Aviation

Rick Hatton President, CEO, 10 Tanker Air Carrier

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